

AMENDMENTS TO THE CLAIMS

Please **CANCEL** claim 6 without prejudice or disclaimer.

Please **AMEND** claims 1-3, 5, and 7-9 as shown below.

Please **ADD** new claims 10-12 as shown below.

This list of claims will replace all prior versions and lists of claims in the application.

1. (Currently Amended) An apparatus for automatically detecting the presence of an external device in an earphone jack port of a mobile terminal, the apparatus comprising:
 - a connection unit to electrically connect for electrically connecting an earphone/microphone set or an external device to the mobile terminal, and to send generating level information according to whether the a-connected device if one of an earphone/microphone set or [[an]] the external device is connected to the mobile terminal, wherein the level information has a first voltage level if the earphone/microphone set is connected to the mobile terminal and a second voltage level if the external device is connected to the mobile terminal different level value according to a connected external device;
 - a sensor to determine for determining whether the earphone/microphone set or the external device is electrically connected to the connection unit according to the voltage level of the level information and to generate generating an indication signal containing a determination result;
 - a main processor to generate for generating a control signal to control the earphone/microphone set or the external device according to the indication signal; and
 - an external device controller to control for controlling the external device, if the external device is connected to the mobile terminal, by receiving the control signal from the main processor,

wherein the external device controller enables the connected external device automatically, ~~when~~ if the external device is connected to the connection unit.

2. (Currently Amended) The apparatus as recited in claim 1, further comprising:

a call controller to generate ~~for generating~~ a call signal indicating whether or ~~not~~ the mobile terminal is used for originating a call; and

an earphone/microphone set controller to control ~~for controlling~~ an earphone/microphone ~~set~~ to pass a voice signal to a voice input/output unit in the mobile terminal according to the voltage level of the level information and the call signal.

3. (Currently Amended) The apparatus as recited in claim 1, wherein the main processor generates the control signal to enable the external device controller if the indication signal represents that the external device is connected to the connection unit, ~~and generating~~ generates a shot signal and a charge control signal.

4. (Previously Presented) The apparatus as recited in claim 3, wherein the external device controller controls the external device according to the shot signal and the charge control signal from the main processor.

5. (Currently Amended) The apparatus as recited in claim ~~[[1]]~~ 2, wherein the main processor generates the control signal to enable the earphone/microphone set controller if the indication signal represents that the earphone/microphone set is connected to the connection unit.

6. (Canceled)

7. (Currently Amended) The apparatus as recited in claim 1, wherein the connection unit includes:

a microphone/charge-control signal end to provide ~~for providing a connection to either a~~
~~both the microphone end of [[the]] a earphone/microphone set plug or and the a~~ charge-control
signal end of an external device plug;

a speaker/shot end to provide ~~for providing a connection to either a~~ both the speaker
end of the earphone/microphone set plug ~~or and the a~~ shot end of the external device plug;

a switch end to identify whether ~~for making known which of the following; the~~
earphone/microphone set or the external device[[.]] is electrically connected to the ~~earphone-~~
~~microphone set/external device~~ connection unit ~~while the earphone-microphone set/external~~
~~device connection unit is physically connected to the speaker/shot end; and~~

a ground end to provide ~~for providing a connection to either a~~ the ground end of the
earphone/microphone set plug ~~as well as the or a~~ ground end of the external device plug.

8. (Currently Amended) A method for automatically detecting the presence of an
external device in an earphone jack port of a mobile terminal, the method comprising the steps
of:

a) obtaining level information from a connection unit, wherein the level information has a
first voltage level if a earphone/microphone set is connected to the mobile terminal and a
second voltage level if the external device is connected to the mobile terminal ~~different level~~
~~value according to a connected external device;~~

b) determining whether the earphone/microphone set or the external device what
external device is electrically connected to the connection unit according to the voltage level of
the level information;

c) enabling an external device control unit if the external device is electrically connected to the connection unit ~~as a determination result of step b)~~; and

d) enabling ~~[[the]]~~ an earphone/microphone set control unit if the earphone/microphone set is electrically connected to the connection unit ~~as a determination result of step b)~~.

9. (Currently Amended) The apparatus as recited in claim 1, wherein the external device is a strobo, wherein the external device controller enables the connected strobo ~~strobe~~ automatically, ~~when if the~~ strobo ~~strobe~~ is connected to the connection unit and a digital camera is used.

10. (New) The method of claim 8, wherein the external device is a strobo.

11. (New) The apparatus of claim 1, wherein the first voltage level is 2.7 volts to 3.0 volts, and the second voltage level is 0.5 volts.

12. (New) The method of claim 8, wherein the first voltage level is 2.7 volts to 3.0 volts, and the second voltage level is 0.5 volts.